COURSES

APPRENTICESHIP INFORMATION SECURITY ANALYST COURSES

APIS 51 - CompTIA's A+ Certification Computer Technician

4 units

This course provides an introduction to the computer hardware and software skills needed to help meet the industry demand for entry-level PC Technicians. This course covers PC hardware, software, security, networking, laptops, printers, operational procedures, operating systems, security, troubleshooting, and mobile devices. The students will study the topics needed to become certified PC technicians. Preparation for the CompTIA A + certification, which verifies knowledge equivalent to that of an entry-level ICT (Information and Communications Technology) technician with about 12 months of hands-on experience. The responsibilities of an ICT professional will be introduced. Students who have completed or are enrolled in CNT 51 may not receive credit. 54 hours lecture, 54 hours laboratory. Transfer: CSU; C-ID# ITIS 110.

Recommended Course Preparation: CIS 50 with a minimum grade of C.

Enrollment Limitation: Admission to this course is limited to apprentices registered with the state of California Department of Apprenticeship Standards. Students must first be accepted into a registered Robert Half Workforce and Innovation Program: Information Security Analyst apprenticeship.

- Credit - Degree Applicable
- Grading Option: Letter or P/NP

APIS 52 - Networking Fundamentals

3 units

This course provides an introduction to computer networking fundamentals skills needed to meet the industry demand for entry-level Network Technicians. Topics include: Ethernet network fundamentals, Local Area Networks (LANs), and Wide Area Networks (WAN) technologies, the Open Systems Interconnection (OSI) model, wiring implementations, network adapters and connectivity devices, IPv4/IPv6 addressing, Voice over IP (VoIP), and wireless standards. Tools to help prevent cyber attacks with IDS (Intrusion Detection Systems), authentication, and encryption are demonstrated. Student labs include: configuration of a SOHO (Small Office/Home Office), a firewall, a virtual private network (VPN), a switch, and a router and documenting a networking using professional drawing software. The responsibilities of an ICT (Information and Communications Technology) professional will be introduced. This course prepares students for the CompTIA Network+ Certification Exam. This professional certification verifies the student has the knowledge equivalent to that of an ICT technician with about 12 months of hands-on experience. Students who have completed or are enrolled in CIS 66 or CNT 52 may not receive credit. 54 hours lecture, 18 hours laboratory. Transfer: CSU; C-ID# ITIS 150.

Recommended Course Preparation: CIS 50 with a minimum grade of C.

Enrollment Limitation: Admission to this course is limited to apprentices registered with the state of California Department of Apprenticeship Standards. Students must first be accepted into a registered Robert Half Workforce and Innovation Program: Information Security Analyst apprenticeship.

- Credit - Degree Applicable
- Grading Option: Letter or P/NP

APIS 53 - Network Security; CompTIA Security + Certification

3 units

The CompTIA Security+ exam will certify the successful candidate has the knowledge and skills required to install and configure systems to secure applications, networks, and devices; perform threat analysis and respond with appropriate mitigation techniques; participate in risk mitigation activities; and operate with an awareness of applicable policies, laws, and regulations. The successful candidate will perform these tasks to support the principles of confidentiality, integrity, and availability. This course provides an introduction to the concepts and practices of secure network design and management using desktop and network operating systems, router and switch operating systems, hardware and software Firewall and VPN technology for wired and wireless systems. The program includes authentication methods and devices, protocol analysis and IP network troubleshooting, strategies for identifying and countering vulnerabilities, network media and topologies in a secure network, intrusion detection and forensic incident response. CompTIA Security+ meets the ISO 17024 standard and is approved by U.S. Department of Defense. Security+ is also compliant with government regulations under the Federal Information Security Management Act (FISMA). Students who have completed or are enrolled in CNT 69 may not receive credit. 45 hours lecture, 27 hours laboratory. Transfer: CSU; C-ID# ITIS 160.

Recommended Course Preparation: CNT 51 with a minimum grade of C. CNT 52 with a minimum grade of C.

Enrollment Limitation: Admission to this course is limited to apprentices registered with the state of California Department of Apprenticeship Standards. Students must first be accepted into a registered Robert Half Workforce and Innovation Program: Information Security Analyst apprenticeship.

- Credit - Degree Applicable
- Grading Option: Letter or P/NP

APIS 54 - Red Hat Linux Administration I

3 units

This course provides hands-on training covering basic installation, management, configuration, documentation and hardware topics for the Linux/UNIX operating system on workstations in a network environment. The course includes comprehensive coverage of topics related to Linux distributions, installation, administration, X-Windows, and networking. This course prepares students for the CompTIA Linux+ Certification Exam. Students who have completed or are enrolled in CS 41 or CNT 7401 may not receive credit. 45 hours lecture, 27 hours laboratory. Transfer: CSU.

Recommended Course Preparation: CIS 50 with a minimum grade of C.

Enrollment Limitation: Admission to this course is limited to apprentices registered with the state of California Department of Apprenticeship Standards. Students must first be accepted into a registered Robert Half Workforce and Innovation Program: Information Security Analyst apprenticeship.

- Credit - Degree Applicable
- Grading Option: Letter or P/NP

APIS 55 - Digital Forensics Fundamentals

3 units

A practical course in Digital Forensics; the detection, and investigation of incidents involving computers, networks, the Internet, and digital information. Case oriented, following the objectives for the CFE Computer Forensics Examiner certification exam and the International Association of Computer Investigative Specialists (IACIS), the class includes understanding and practice in basic computer forensics, methods of investigation, analysis of storage media, logs, and tracking persons and data, using court-approved evidence collection tools. Also covered, computer forensics as a profession, the computer investigation process, and technical writing. Students who have completed or are enrolled in CNT 68 may not receive credit. 45 hours lecture, 27 hours laboratory. Transfer: CSU; C-ID# ITIS 165.

Recommended Course Preparation: CIS 66 with a minimum grade of C or CNT 52 with a minimum grade of C.

Enrollment Limitation: Admission to this course is limited to apprentices registered with the state of California Department of Apprenticeship Standards. Students must first be accepted into a registered Robert Half Workforce and Innovation Program: Information Security Analyst apprenticeship.

- Credit - Degree Applicable

- Grading Option: Letter or P/NP

APIS 56 - Cisco CCNA2/3 Switching, Routing, and Wireless Essentials (SRWE)

3 units

This is course 2 of 3 of the Cisco CCNA Routing and Switching Certification Objectives. The concepts covered in this course include Switching: how Layer 2 switches forward data; how STP enables redundancy in a Layer 2 network; the operation of dynamic address allocation in IPv6 networks by using SLAAC and DHCPv6; how FHRPs provide default gateway services in a redundant network; how vulnerabilities compromise LAN security; how Wireless LANs enable network connectivity; how routers use information in packets to make forwarding decisions; and troubleshooting static and default route configurations. The hands-on labs include Basic Configuration of devices by using security best practices; Implementing VLANs and trunking in a switched network; Troubleshooting inter-VLAN routing on Layer 3 devices; Troubleshooting EtherChannel on switched links; Implementing DHCPv4 to operate across multiple LANs; Configuring switch security to mitigate LAN attacks; Implementing a WLAN using a wireless router and WLC; configuring and troubleshooting IPv4 and IPv6 floating static routes. Students who have completed or are enrolled in CNT 8002 may not receive credit. 45 hours lecture, 27 hours laboratory. Transfer: CSU; C-ID# ITIS 151.

Recommended Course Preparation: CNT 8001 with a minimum grade of C.

Enrollment Limitation: Admission to this course is limited to apprentices registered with the state of California Department of Apprenticeship Standards. Students must first be accepted into a registered Robert Half Workforce and Innovation Program: Information Security Analyst apprenticeship.

- Credit - Degree Applicable
- Grading Option: Letter or P/NP

APIS 94 - Occupational Work Experience - Information Security Analyst Apprenticeship

1 - 8 units

College supervised on-the-job training. Apprenticeship work experience in an occupation related to student's apprenticeship program. Cooperative effort of the work supervisor, student, Joint Apprenticeship Training Council (JATC) or Program Sponsor, and instructor to achieve work-based learning objectives. Student must be enrolled in an apprenticeship program. Each Unit of Credit requires 75 hours of paid work experience. Students can earn 1 to 8 units per semester for a maximum of 16 units of Cooperative Work Experience, which includes General Work Experience and Occupational Work Experience/Internship. May be taken any number of times for a maximum of 16 units of Cooperative Work Experience..

Enrollment Limitation: Admission to this course is limited to apprentices registered with the state of California Department of Apprenticeship Standards. Students must first be accepted into a registered Robert Half Workforce and Innovation Program: Information Security Analyst apprenticeship.

- Credit - Degree Applicable
- Grading Option: Pass/No Pass